AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A computerized interface for data presentation, comprising:

a property analyzer that determines an item distribution and forms a plurality of first-level clusters based in part on a first property of a plurality of properties, and automatically determines ~~selects at least one other property and determines at least one other~~ a respective item distribution ~~based in part on the at least one~~ for each other property of the plurality of properties, calculates a clusterization score for each other property based on the respective item distribution, and selects one other property having a highest clusterization score; and

an organizer that automatically forms a plurality of new clusters based in part on the ~~at least~~ one other property, and presents the plurality of new clusters.

2. (Currently amended) The interface of claim 1, the plurality of properties are associated with a plurality of items, the plurality of items are stored in at least one of a local [[and]] or a remote storage location, or a combination thereof.

3. (Currently amended) The interface of claim 2, the plurality of items include at least one of a document, a file, a folder, an image, an audio file, a video file, a code, a message, or a computer representation of external objects including people or locations, or a combination thereof.

4. (Currently amended) The interface of claim 1, the plurality of properties comprises a type of an item, a date or time the item was created, people associated with the item, a location of the item, a category of the item, or a system, application, administrator or user-defined property of the item, or a combination thereof.

5. (Previously presented) The interface of claim 1, the first property is a type of an item.

6. (Withdrawn) The interface of claim 1, the property analyzer assigns a clusterization score to each of the plurality of properties and selects the at least one other property based on a highest clusterization score.

7. (Currently amended) The interface of claim [[6]] 1, the clusterization score is calculated ~~as a function of the number of items in each cluster and the number of clusters in the plurality of clusters~~ in the following equation: *clusterization score* = $n\_items_{cluster1} * n\_items_{cluster2} * \ldots$, for all clusters associated with a particular property of the plurality of properties, where *n_items* is the number of items associated with a respective cluster.

8. (Currently amended) The interface of claim [[6]] 1, the clusterization score is calculated ~~as a function of a total number of items and the number of items in each cluster of the plurality of clusters~~ as follows: *clusterization score* = $(N\_total)! / ((n\_items_{cluster1})! * (n\_items_{cluster2})! * \ldots)$, for all clusters associated with a particular property of the plurality of properties, where *N_total* is the total number items of all clusters and *n_items* is the number of items associated with a respective cluster.

9. (Currently amended) The interface of claim 1, further comprising a user interface to at least one of display cluster results, receive query selections, [[and]] receive property information, or display information relating to an item in a cluster, or a combination thereof.

10. (Original) A computer readable medium having computer readable instructions stored thereon for implementing the property analyzer and the cluster organizer of claim 1.

11. (Withdrawn) A system for automatically clustering query results, comprising:

means for retrieving properties of a plurality of items;

means for determining a score for the plurality of items based upon the properties; and

means for automatically clustering data associated with the items based upon the determined score.

12. (Withdrawn) A method for automatic query clustering, comprising:

associating one or more properties with a plurality of data items;

determining a distribution for the data items based upon the properties; and

automatically clustering the data items based upon the determined distribution.

13. (Withdrawn) The method of claim 12, the distribution is determined from at least one of the following equations:

$score = n\_items_{cluster1} * n\_items_{cluster2} * \ldots$

$score = (N\_total)! / ((n\_items_{cluster1})! * (n\_items_{cluster2})! * \ldots)$

14. (Withdrawn) The method of claim 12, further comprising processing N items and M properties.

15. (Withdrawn) The method of claim 14, further comprising at least one of initializing M hash tables, iterating through N items and, for each item, iterating through M properties.

16. (Withdrawn) The method of claim 15, further comprising calculating a hash value for each property.

17. (Withdrawn) The method of claim 16, further comprising calculating a clusterization score for each property using data from an associated hash table.

18. (Withdrawn) The method of claim 12, further comprising automatically organizing clusters based upon a predetermined threshold.

19. (Withdrawn) The method of claim 18, further comprising suggesting alternative cluster grouping.

20. (Withdrawn) The method of claim 18, further comprising organizing clusters based upon user-defined properties.

21. (Currently amended) A graphical user interface, comprising:

one or more data items and associated properties stored in a database;

one or more display objects created for each of the data items;

an input component for selecting the data items and the associated properties; [[and]]

a property analyzer that forms a plurality of clusters based on a first property of a plurality of properties, and automatically calculates a clusterization score for each other property of the plurality of properties and selects one other property of the plurality of properties having a highest clusterization score, and determines a data item distribution based in part on the one other property;

an organizer component that creates new clusters and stores the display objects associated with the data items in a respective new cluster based on the one other property; and

a display component to present the display objects and the new clusters based in part on an automated analysis of the properties.

22. (Original) The interface of claim 21, further comprising controls for interacting with the properties.

23. (Original) The interface of claim 22, the properties are employed for nested querying of results.

24. (Currently amended) The interface of claim 22, the properties include at least one of a type, a location, a category, a person, a date, a time, [[and]] or a user-defined parameter, or a combination thereof.

25. (Original) The interface of claim 22, further comprising a component to learn implicitly from user actions.

26. (Original) The interface of claim 22, further comprising at least one semi-collapsed list or group.

27. (Original) The interface of claim 26, further comprising controls for expanding the list or group.

28. (Original) The interface of claim 27, where at least one large property cluster is presented in a squeezed view utilizing a semi-collapsed list.

29. (Currently amended) A computerized interface for optimizing retrieval and display of information, comprising:

a property analyzer that determines an item distribution and forms a plurality of clusters based on a first property of a plurality of properties, [[and]] automatically calculates a clusterization score for each other property of the plurality of properties and selects at least one other property of the plurality of properties based on the clusterization score associated with the at least one other property, and determines a distribution of a plurality of items based in part on the at least one other property; and

an organizer that automatically forms a plurality of optimized clusters and distributes the plurality of items in the plurality of optimized clusters based in part on the at least one other property, and presents the plurality of optimized clusters.

30. (Currently amended) The interface of claim 29, the plurality of items are stored in at least one of a local [[and]] or a remote storage location, or a combination thereof.

31. (Currently amended) The interface of claim 30, the plurality of items comprise at least two of a document, a file, a folder, an image, an audio file, a video file, a code, a message, or a computer representation of external objects including people or locations, or a combination thereof.

32. (Currently amended) The interface of claim 29, the plurality of properties comprises a type of the item, a date or time the item was created, people associated with the item, a location of the item, a category of the item, or a system, application, administrator or user-defined property of the item, or a combination thereof.

33. (Previously presented) The interface of claim 32, the plurality of properties further comprises metadata.

34. (Currently amended) The interface of claim 29, the property analyzer ~~calculates a clusterization score for each of the plurality of properties and~~ selects the at least one other property based on a highest clusterization score, the clusterization score is ~~calculated as a function of the number of clusters and the number of items in each of the plurality of clusters~~ equal to the product of a number of items in a respective cluster multiplied by a number of items per cluster in each other respective cluster, or to a total number of items divided by the product of the factorial of a number of items in a respective cluster multiplied by the factorial of a number of items per cluster in each other respective cluster.

35. (Currently amended) The interface of claim 29, at least one of the plurality of optimized clusters or the plurality of items, or a combination thereof, are presented in a semi-collapsed form based on a significance criteria.